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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,083	03/03/2008	Heinz Mueller	C 2944 PCT/US	2325
29737	7590	05/26/2010		
SMITH MOORE LEATHERWOOD LLP			EXAMINER	
P.O. BOX 21927			ADMASU, ATNAF S	
GREENSBORO, NC 27420				
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			05/26/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/595,083	Applicant(s) MUELLER ET AL.	
	Examiner ATNAF ADMASU	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/25/2008</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 11-27 are pending as filed on 03 February 2006 and claims 1-10 being cancelled.

Information Disclosure Statement

2. The information disclosure statement submitted on 25 March 2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statements.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 16 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 lacks antecedent basis for "compound", since claim 11, from which claim 16 depends, recites "An ethoxylated derivative..." For the purpose of examination against the prior art, claim 16 was construed to recite, "The derivative according to claim 11, wherein the derivative..."

Regarding claim 25, the inclusion of a term within parentheses renders the claim indefinite because it is unclear whether the included term is part of the claimed invention.

Claim Rejections - 35 USC § 102 and/or 35 USC § 103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

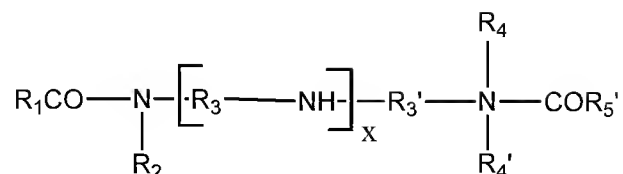
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11-27 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 USC 103(a) as being unpatentable over US Patent 3,230,104 (Falkenberg hereinafter).

Falkenberg teaches a process and composition for producing asphalt emulsion (Column 1, lines 11-14). The asphalt emulsions are prepared by adding an amidoamine soap, an aqueous solution of an acid and thereafter the water and asphalt are emulsified (column 2, lines 57-64). Falkenberg further teaches the amidoamine soap employed is of the structure:



R₁ and R₅ each represents the same or different organic group having from about six to about twenty carbon atoms. R₁ and R₅ can be alkyl, cycloalkyl, heterocyclic, aryl, alkylaryl and arylalkyl. Preferably R₁ and R₅ are alkyl groups having 11 to 19 carbon atoms or abietyl radicals. R₂, R₄ and R₄' are selected from among hydrogen and organic groups containing from one to about nineteen carbon atoms including alkyl groups such as methyl, ethyl, propyl, isopropyl, n-butyl, isobutyl, tert-butyl, sec-butyl, octyl, dodecyl and stearyl, cycloalkyl groups such as cyclohexyl, aryl groups such as phenyl and naphthyl, alkaryl and aralkyl groups such as benzyl, phenethyl, and methyl phenyl, and heptaerocyclic groups such as piperidyl. R₄ and R₄' can also be taken together to form a heterocyclic group with the quaternary nitrogen atom (column 2, line 65—column 3, lines 12).

Falkenberg further discloses the amidoamine is prepared by mixing a selected organic acid or mixture of acids with an excess of a polyamine and reacting them to form a polyamine soaps, and then heating the soap until one of the soap groups is converted to an amine group (column 3, line 71 – column 4, line 1). Generally, from about 0.1 to about 2.5 parts of amidoamine soap composition can be mixed with 100 parts by weight of asphalt (column 4, lines 48-52).

Regarding the recitation in independent claims 11 and 25, “an amidoamine as an emulsifier in drilling fluids which contain at least one continuous oil phase, an aqueous phase”, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Furthermore, claims 16, 17, 23 and 24 are viewed as product-by-process claims and hence the methods it is created by are not pertinent, unless applicant can show a different product is produced. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” See MPEP 2113.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

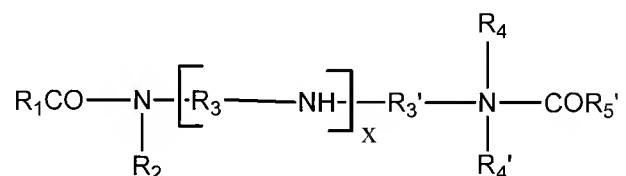
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 11—27 are rejected under 35 U.S.C. 103(a) as being unpatentable over

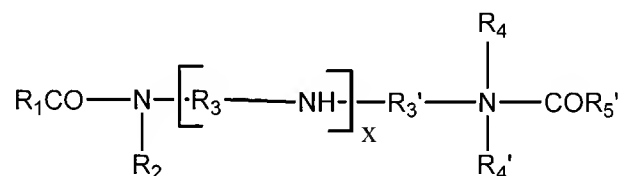
US Patent 5,869,434 (Mueller hereinafter) – cited by Applicant - in view of Falkenberg.

Mueller teaches a water in oil invert emulsions which contain a disperse aqueous phase in the continuous oil phase, and more particularly drilling fluids optionally containing typical dissolved and/or disperse auxiliaries, such as viscosifiers, emulsifiers, fluid loss additives, wetting agents, fine-particle weighting agents, salts, alkali reserves and/or biocides. These bore hole preparations contain at least predominantly linear hydrocarbon compounds olefinically unsaturated in the alpha position (column 4, line 46 – column 5, line 22). Mueller further teaches the emulsifiers suitable for use in practice for forming water-in-oil emulsions are selected oleophilic fatty acid salts, for example those based on amidoamine compounds (column 9, lines 40-44).

Mueller does not disclose expressly the amidoamine is an ethoxylated derivative of the following formula:



Falkenberg teaches a process and composition for producing asphalt emulsion (Column 1, lines 11-14). The asphalt emulsions are prepared by adding an amidoamine soap, an aqueous solution of an acid and thereafter the water and asphalt are emulsified (column 2, lines 57-64). Falkenberg further teaches the amidoamine soap employed is of the structure:



R_1 and R_5 each represents the same or different organic group having from about six to about twenty carbon atoms. R_1 and R_5 can be alkyl, cycloalkyl, heterocyclic, aryl, alkylaryl and arylalkyl. Preferably R_1 and R_5 are alkyl groups having 11 to 19 carbon atoms or abietyl radicals. R_2 , R_4 and R_4' are selected from among hydrogen and organic groups containing from one to about nineteen carbon atoms including alkyl groups such as methyl, ethyl, propyl, isopropyl, n-butyl, isobutyl, tert-butyl, sec-butyl, octyl, docetyl and stearyl, cycloalkyl groups such as cyclohexyl, aryl groups such as

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phenyl and naphthyl, alkaryl and aralkyl groups such as benzyl, phenethyl, and methyl phenyl, and heterocyclic groups such as piperidyl. R_4 and R_4' can also be taken together to form a heterocyclic group with the quaternary nitrogen atom (column 2, line 65—column 3, lines 12).

Falkenberg further discloses the amidoamine is prepared by mixing a selected organic acid or mixture of acids with an excess of a polyamine and reacting them to form a polyamine soap, and then heating the soap until one of the soap groups is converted to an amine group (column 3, line 71 – column 4, line 1). Generally, from about 0.1 to about 2.5 parts of amidoamine soap composition can be mixed with 100 parts by weight of asphalt (column 4, lines 48-52).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the amidoamine emulsifier of Falkenberg in the drilling fluid of Mueller. The rationale to do so would have been the motivation provided by the teaching of Falkenberg that to do so would display good adhesion to both calcareous and siliceous aggregates (column 2, lines 42-45).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ATNAF ADMASU whose telephone number is (571)270-5465. The examiner can normally be reached on M-F 8:00-5:30, Flexible Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ASA/
Atnaf Admasu
Art Unit 1796
May 17, 2010

/Timothy J. Kugel/
Primary Examiner, Art Unit 1796